



*Date of Application, 25th Nov., 1895—Accepted, 28th Dec., 1895*

### COMPLETE SPECIFICATION.

#### Improvements in Apparatus for Facilitating Surgical Extensions and Bandaging of the Lower Extremities and Pelvis.

I FRANZ BINGLER of Ludwigshafen on the Rhine, Germany Surgical Instrument Maker do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement and accompanying drawings to which reference is hereinafter made :—

My said invention relates to improvements in apparatus for facilitating surgical extensions and bandaging of the lower extremities and pelvis.

The first part of my said invention consists of the stretching apparatus shown in Fig. 1 the principal object of which is to support the patient in a raised position that the surgeon without assistance and without altering the position of the body may apply bandages or splints from the sole of the foot right up to the tuber and pelvis.

To complete the stretching apparatus I use a supporting apparatus as shown in Fig. 2.

The stretching apparatus Fig. 1 consists of a longitudinally adjustable frame  $a$   $a^1$  one end ( $a^1$ ) of which may be secured at any desired height to an operating chair or table. The other end ( $a$ ) is supported by a hinged strut  $b$  of variable length.

The movable part  $a$  of the frame is bent upwards and carries a foot lashing  $d$  provided with a quick acting screw and nut  $e$  and capable of vertical adjustment in a slot in the turned up part of the frame  $a$ .

Secured to the part of the frame  $a^1$  and taking through a slot in the turned up part of the frame  $a$  is a stretcher rail  $c$  carrying two leg rests  $f^1$   $f^2$  so mounted as to be capable of setting at any desired positions in the stretcher rail.

The seat ring  $g$  is screwed in a carrier  $i$  held in a socket in the pillar  $h$ . A vertically adjustable body rest  $K$  is mounted on the table or in any other suitable position with relation to the stretching apparatus.

Owing to the adjustability of all parts of the stretching apparatus it may be used for large or small patients. In bandaging the leg rests  $f^1$   $f^2$  are alternately shifted. The seat ring  $g$  may be enveloped in the bandage and after being lifted out of the socket of the pillar  $h$  the carrier  $i$  may be screwed off. The bandaging effected in the stretching apparatus is secured in any desired position to the splint or supporting apparatus shown in Fig. 2.

The latter consists of the longitudinally adjustable splint bars  $l$   $l^1$  the adjustable strut  $m$  the supporting ring  $n$  and the adjustable foot rest  $a$  capable of rotation on the splint bar  $l$ . Such a supporting apparatus permits any desired setting rotation or other surgical operations to be performed and can be used for all sizes of patients.

Both of the apparatus can be used either right or left and by using the two in combination any extension produced by the stretching apparatus (Fig. 1) remains undisturbed or undiminished by the supporting apparatus (Fig. 2).

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is—

The use combination and construction of a stretching apparatus (Fig. 1) having

[Price 8d.]



*Apparatus for Facilitating Surgical Extensions, &c., of the Lower Extremities, &c.*

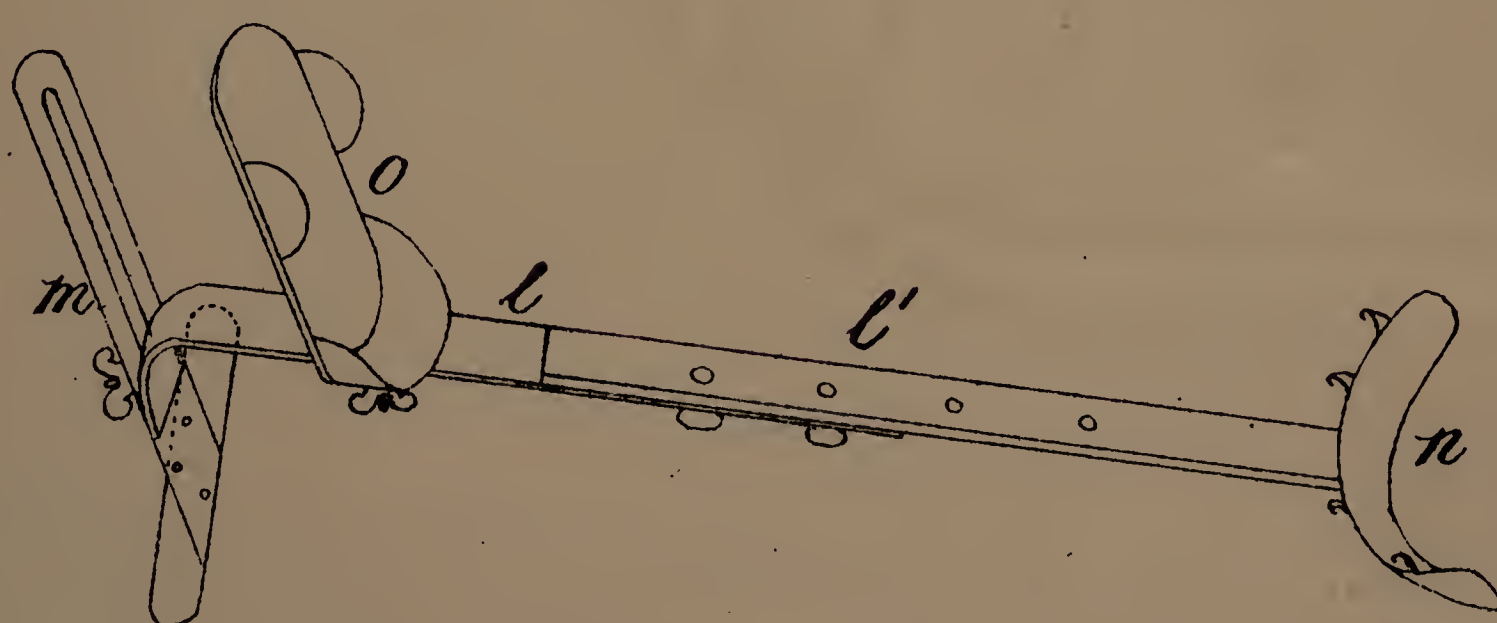
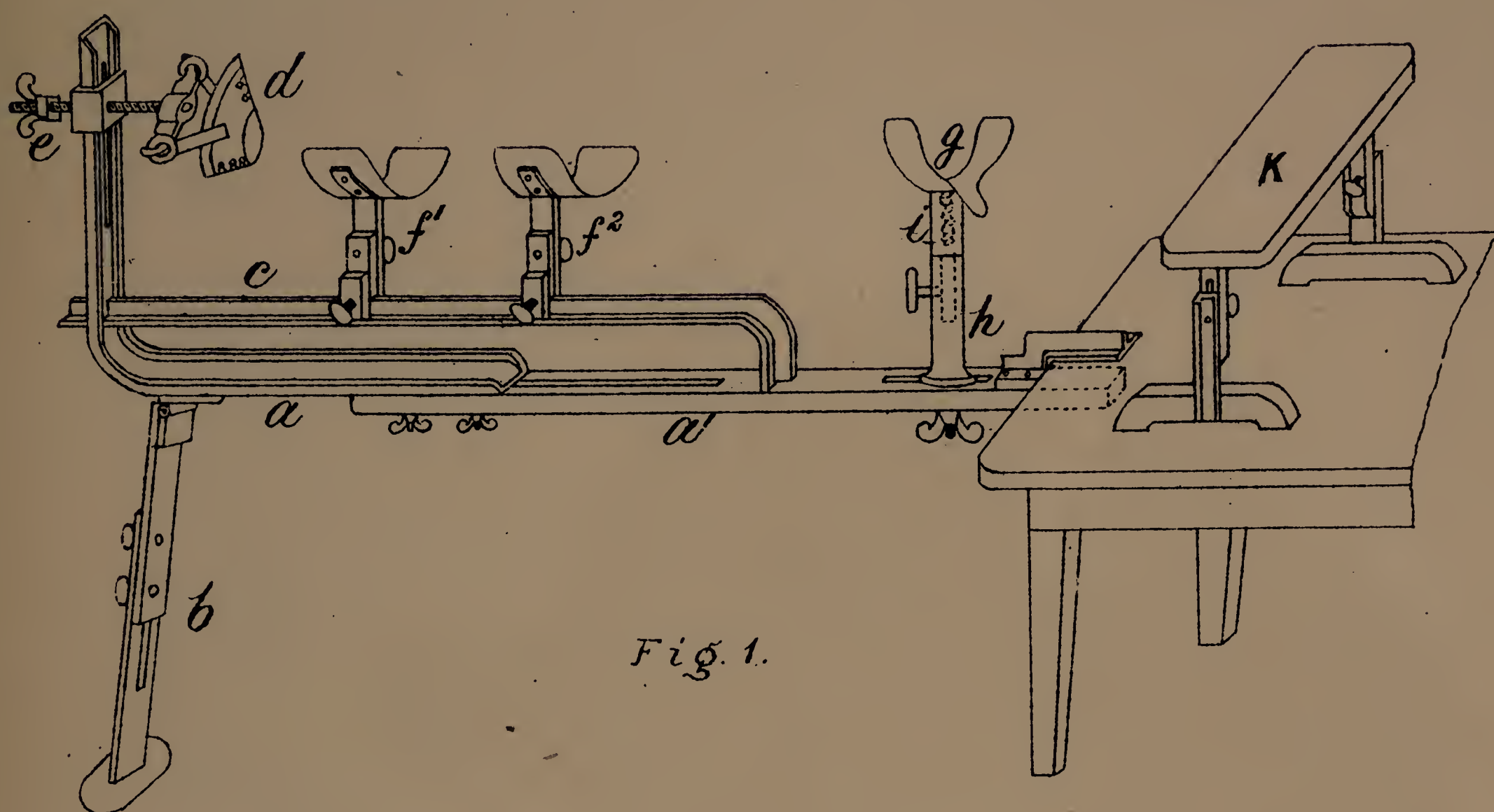
a longitudinally adjustable frame *a* *a*<sup>1</sup> a foot lashing (*d*) provided with a screw traverse motion *e* longitudinally adjustable leg supports *f*<sup>1</sup> *f*<sup>2</sup> a removable and adjustably mounted seat ring *g* and a supporting apparatus or splint (Fig. 2) having longitudinally adjustable splint bars *l* *l*<sup>1</sup> an adjustable hinged strut *m* a supporting ring *n* and an adjustable and rotatable foot holder *o* substantially as and 5 for the purpose hereinbefore set forth.

Dated this 22nd day of November 1895.

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[This Drawing is a reproduction of the Original on a reduced scale.]

